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NM—04—2026

FACULTY OF SCIENCE AND TECHNOLOGY

B.Pharm. (Fourth Year) (Eighth Semester) EXAMINATION

APRIL/MAY, 2026

BIostatistics AND RESEARCH METHODOLOGY

(Friday, 17-4-2026)

(BP801T)

Time : 2.00 p.m. to 5.00 p.m.

Time—3 Hours

Maximum Marks—75

N.B. :— (1) All questions are compulsory.

(2) Answer to the point only.

(3) Figures to the right indicate full marks.

(4) Scientific calculator is not allowed.

1. Answer the following :

10×2=20

(a) Define the term probability.

(b) What is need of research ?

(c) Enlist types of curve fittings.

(d) What is Null Hypothesis and Alternative Hypothesis ?

P.T.O.



- (e) Calculate the Arithmetic mean of five values 4, 36, 45, 50, 75.
- (f) Define standard deviation and write its formula.
- (g) Enlist types of graphs.
- (h) What is SPSS and Minitab ?
- (i) Define cohorts and experimental study.
- (j) Give the application of Biostatistics in pharmacy.

2. Answer any *two* of the following :

2×10=20

- (a) Write a note on Regression modeling.
- (b) Explain in brief about sampling methods.
- (c) Explain Experiment Design.

3. Attempt any *seven* of the following :

7×5=35

- (a) Write a brief note on sample size determination.
- (b) Describe the parametric and non-parametric test.
- (c) Explain the multiple correlations.
- (d) Write about the Type-I Error and Type-II Error.
- (e) Discuss various phases of clinical trials.



- (f) Calculate the mean and standard deviation from the following data :

$$X = 5, 10, 15, 20.$$

- (g) Write in detail about Hypothesis Testing.
- (h) Write a brief note on Plagiarism.
- (i) Describe in brief Research Report.

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NM—08—2026

FACULTY OF PHARMACEUTICAL SCIENCE AND TECHNOLOGY

B.Pharm. (Fourth Year) (Eighth Semester) EXAMINATION

APRIL/MAY, 2026

SOCIAL AND PREVENTIVE PHARMACY

(Monday, 20-4-2026)

(BP 802T)

Time : 2.00 p.m. to 5.00 p.m.

Time—3 Hours

Maximum Marks—75

N.B. :— (1) *All questions are compulsory.*

(2) *Draw neat labelled diagram wherever necessary.*

(3) *Answer to the point only.*

1. *Solve the following questions :*

10×2=20

(a) *Write sign and symptoms of Ebola virus diseases.*

(b) *Define Vitamin. Write deficiency disease of Vitamin A.*

(c) *Enlist various health indicators.*

(d) *Give objectives of National family welfare programme.*

(e) *Define drug abuse and drug addiction.*

(f) *Write withdrawal symptoms of alcohol.*

P.T.O.



- (g) Define health. Enlist concepts of health.
- (h) Enlist school health related problems.
- (i) Write sign and symptoms of Malaria.
- (j) Write objectives of National health intervention programme for mother and child.

2. Answer any *two* of the following : 2×10=20

- (a) Explain about prevention and control of Diabetes mellitus.
- (b) Explain Universal immunization programme.
- (c) Explain role of WHO in Indian National Programme.

3. Answer any *seven* of the following : 7×5=35

- (a) Describe prevention and control of hypertension.
- (b) Explain in short personal hygiene with its importance.
- (c) Explain pulse polio programme.
- (d) Explain National Tobacco Control Programme.
- (e) Explain malnutrition and its preventive measures.
- (f) Discuss impact of urbanization on health and diseases.
- (g) Explain health promotion and education in school.
- (h) Write about functions of Primary Healthcare Centre (PHC).
- (i) Write a note tuberculosis.

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NM—16—2026

FACULTY OF PHARMACEUTICAL SCIENCE

B.Pharma (Fourth Year) (Eighth Semester) EXAMINATION

APRIL/MAY, 2026

PHARMACEUTICAL REGULATORY SCIENCE

Paper—BP804ET

(Friday, 24-4-2026)

Time : 2.00 p.m. to 5.00 p.m.

Time—3 Hours

Maximum Marks—75

N.B. :— (i) All questions are compulsory.

(ii) Answer to the point only.

(iii) Figures to the right indicate full marks.

1. Answer the following questions :

10×2=20

(i) Write objectives of Regulatory affairs .

(ii) What is CTD ?

(iii) What is importance of the informed consent ?

(iv) Write difference between Preclinical and Postclinical trial.

P.T.O.



(v) Write the full form of :

(a) CDSCO

(b) DMF.

(vi) Define :

(a) Generic drug

(b) Branded drug.

(vii) Write functions of CDSCO.

(viii) Define Ethics and Law.

(ix) What is code of federal regulation ?

(x) Enlist different applications used for approval in EU.

2. Answer any *two* of the following :

2×10=20

(i) Explain in brief regulatory approval process for New Drug Application.

(ii) Define clinical trials and explain in detail different stages of clinical trials.

(iii) What is eCTD ? Explain different modules of CTD in detail.

3. Answer any *seven* of the following :

7×5=35

(i) Explain organization structure and function of Japan Regulatory bodies.

(ii) Write salient features of Pharmacovigilance.

(iii) Explain the formation and function of independent ethics committee.



- (iv) Explain Good Clinical Practices.
- (v) Discuss about clinical trial protocols.
- (vi) Write an overview on ACTD.
- (vii) With the suitable example differentiate between branded and generic drug.
- (viii) Discuss the criteria for selection of human volunteers in clinical trials.
- (ix) Explain salient features of orange book.

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NM—22—2026

FACULTY OF SCIENCE AND TECHNOLOGY

B.Pharm. (Final Year) (Eighth Semester) EXAMINATION

APRIL/MAY, 2026

COSMETIC SCIENCE

(Wednesday, 29-4-2026) C B P 809 ET Time : 2.00 p.m. to 5.00 p.m.

Time—3 Hours

Maximum Marks—75

N.B. :— (1) All questions are compulsory.

(2) Answer to the point only.

(3) Figures to the right indicate full marks.

(4) Illustrate your answers with neat sketches wherever necessary.

1. Solve the following :

10×2=20

(a) Give formula for tooth paste.

(b) Define the term Dermatitis.

(c) What are the causes of dry skin ?

(d) Mention different excipients used in cosmetics.

(e) Give ideal properties of shampoos.

(f) Define Deodorants and Antiperspirants.

(g) Give the structure of Hair.

P.T.O.



- (h) Enlist common problems of oral cavity.
- (i) Give structure of skin.
- (j) Define cosmetics and enlist any *four* marketed brands.

2. Solve any *two* of the following : 2×10=20

- (a) Give formulation, manufacturing and evaluation of soaps and syndet bars.
- (b) Discuss in detail cosmetic problems associated with skin.
- (c) Explain in detail formulation, manufacturing and evaluation of shampoos.

3. Solve any *seven* of the following : 7×5=35

- (a) Discuss in brief role of Neem and Clove in oral care cosmetics.
- (b) Give classification of sunscreens.
- (c) Discuss in brief evaluation tests for tooth paste.
- (d) Give advantages and disadvantages of vanishing creams.
- (e) Give principle of sebumeter.
- (f) Describe in brief role of Aloe and Turmeric in skin care cosmetics.
- (g) Write in brief about para-phenylene diamine based hair dye.
- (h) Give formula and method of preparation of cold cream.
- (i) Discuss in brief hair growth cycle.